

Sustainability in Hospitality Education: A Conceptual Viewpoint on Situated Learning

Gaurav Chawla
Swiss Hotel Management School, Leysin, Switzerland.

Abstract

This conceptual paper focuses on sustainability education (SE) in hospitality management degree programmes. As sustainability is gaining global recognition as a prominent socio-economic agenda, it is increasingly finding its place in higher education also (Deale, Nichols and Jacques, 2009). The report discusses the complexity of teaching sustainability, as learning about sustainability is geared more towards changing attitudes and behaviours (Dale and Newman, 2005; Cotgrave and Kokkarinen, 2010), rather than acquiring skills and knowledge, *per se*. SE therefore is not consistent with traditional models of learning, teaching and assessment (LTA). With this reasoning, this paper argues that SE can only be effective if such agenda forms the context within which hospitality education is delivered. By extension, theory of situated learning (Lave and Wenger, 1991) is introduced to support the idea of sustainable campus (SC), effectively a learning laboratory, where learning of sustainability related matters is not confined to the classroom, but extends it to all aspects of the student learning. The preliminary findings, based on secondary research support the idea that hospitality management courses be located within the overall context of sustainability, with SC as the physical embodiment of such education.

Key words: sustainability education, situated learning, sustainable campus.

Introduction

Since the ascension of sustainability agenda to international platforms through the Brundlandt Commission Report (World Commission for Environment and Development, 1987), it has become the most prominent socio-political agenda at the global level. Mowforth and Munt (2009, p.18) succinctly define this rather broad concept as ‘ sustainability encapsulates the growing concern for the environment and natural resources, though it has also had increasing resonance in social and economic issues’. The authors effectively highlight the multiplicity of sustainability discourse. As concern for prudent management of non-renewable resources grew, sustainable management now is a prime consideration for federal and local governments, media, customers, local communities, academics and businesses alike (Bader, 2005; Nichols, 2007).

Given these developments, it is unsurprising that sustainability is now an integral part of many business management degree programmes. Tourism studies tend to approach such issues from a policy and planning perspective (Herremans, 2006). Deale *et al.* (2009) argue that education for sustainable development (ESD) has been a significant movement within higher education in recent times. To further highlight the relevance of this paradigmatic shift, the United Nations declared 2005-2014 as the Decade for

Education in Sustainable Development, which aims to ‘promote education as a basis for a more sustainable human society’ (UNDESD, 2011). Many other commentators agree that sustainability is finding its place within mainstream curriculum in hospitality management courses, rather than just an interesting alternative (Boley, 2011). This is crucial for the future viability of the industry itself, as hospitality and tourism sectors share a unique symbiotic relationship with natural and cultural resources (Office for National Statistics, 2011). The industry needs to exploit resources (often excessively so, as has been widely reported) and at the same time depends on them for its own survival to seduce the tourist to travel.

Therefore, continued sustainability of the industry itself is dependent on qualified professionals, who can accept sustainable development principles as part of their management values. The inclusion of sustainability agenda within hospitality curriculum is a key imperative, as sustainable resource management is widely perceived as the way business will be done in the 21st century (Deale *et al.*, 2009; Jurowski and Liburd, 2001). However, there is growing debate about the most effective approach to incorporating sustainability in hospitality curriculum; and this gap is addressed through this study. Boley (2011) and Clarke (1997) take the discourse of effective SE further and advocate a fundamental paradigmatic shift. The scholars argue that hospitality and tourism education must be situated within the context of sustainability (rather than the other way round), otherwise the latter will always remain a component thereof. In other words, sustainability should be the end result of hospitality education. Based on this line of inquiry, this study investigates the relevance of situated learning (Lave and Wenger, 1991) as an effective approach to SE in hospitality management programmes.

Research methodology

This conceptual paper is based solely on secondary research. Recent articles on situated learning and those investigating sustainability in hospitality education were considered. Journal for Sustainability in Higher Education served as an instrumental resource. The keywords used to access literature were sustainability education, education for sustainable development, sustainability in higher education and sustainability in hospitality education. This study is preliminary to a larger research, and findings will be empirically tested at a later stage of development.

Literature review

Situated learning

Lave and Wenger (1991) conceptualised situated learning and contend that learning is embedded in everyday practices, and therefore by nature is a social as well as individual phenomena. Situated learning theory supports relational context as critical to all learning. Hoadley and Kilner (2005, p. 33) support the importance of context and argue that ‘knowledge is created and shared when there is purposeful conversation around the content in context’. The theory of situated learning focuses on three main principles:

- ✚ Communities of Practice (CoP) : CoP are places where we develop, negotiate and share our understanding of the world. Wenger *et al.* (2002) define CoP as ‘a group of people who share a concern, a set of problems, or their passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an on-going basis’. This shared interest, or the problem then becomes the context within which meaningful interactions take place. It is worth highlighting that CoP establish the context for collective learning process. Wals (2010) highlights the social and personal elements of learning, and emphasises that in the process of relating to or mirroring, the personal ideas may change, as a result of new insights and/ or competing views. Much more than a teacher / learner dyad, CoP thrive on a richly diverse field of participants.
- ✚ Legitimate Peripheral Participation : refers to the social structures involving relations of power within participants of CoP. The key premise here is that participants gradually move from a peripheral position within the group towards full membership. This can also be understood from a novice to expert perspective.
- ✚ Cycles of Reproduction and Transformation: This dimension of situated learning implies continuity and enduring practice, or the transfer of knowledge from the master to the apprentice.

Given the scope of this study, the context within which learning is situated and CoP are the most relevant dimensions, and hence this paper chooses to focus on these two aspects of the theory.

The development of human knowing in an on-going social world is part of long Marxist tradition in social sciences. Similarly, Lave and Wenger (1991) view learning as the historical production, transformation and change of persons. Participation is always situated in negotiation of meaning in the world. While highlighting the significance of the context within which learning takes place, the authors view learning as an activity by specific individuals in specific circumstances. They even part teaching and learning, and provide substantial examples of cases where learning is not dependent on ‘observable teaching’. Instead the practice of the community creates the ‘curriculum’ in a broad sense. The curriculum unfolds itself through engagement in practice. This is ideal from CoP perspective, as directive pedagogy may impede development of learning relationships. Lave (1989) therefore argues that in situated learning, the learning curriculum is not circumscribed by the teaching curriculum. In a similar vein, Hodgkinson-Williams *et al.* (2008) contend that situated learning can bring the values of education beyond confines of the classroom. This line of thinking is further supported by Cortese (2003), who notes that students learn from everything around them; and these activities form a complex web of experience and learning. Based on the premises of CoP, Wright (2007) views HEIs as ‘communities of learning’.

Critical views on situated learning

However, critics of situated learning theory have drawn attention to issues of power and control within social dynamics of learning (Contu and Willmott, 2003). The scholars problematise these issues, and postulate that they might impact learning negatively. Likewise, Roberts (2006) warns against CoP becoming static and resistant to change. Handley *et al.* (2006) observe that rather than the word 'practice' in CoP, participation is more apt as it implies meaningful activity, where meaning is developed through shared identities and relationships. Fox (2000) criticises the theory as well, while noting that CoP tells us nothing about how members might change their practice. In response of these critiques, 'transformative social learning' (Wals, 2010) is finding favours in current scholarship, as this allows students their own problematisation and critical analyses of everyday events. O'Sullivan (2003) agrees and states that transformative here refers to a new way of seeing and being, while social learning is embedded in mirroring one's own ideas, views and values with those of others. Karalis (2010) defines transformative learning as a process by which we transform problematic frames of reference into more open, reflective and therefore functional ones. Although there is clear value in transformative social learning, given the salience of the context in education, this paper chooses to adopt the fundamental premise of situated learning.

The context of sustainability education (SE)

The context of SE in higher education is very unique, and therefore demands a shift in learning and teaching methods. Dale and Newman (2005) establish that the traditional discipline-based model of education, focused on skill acquisition through knowledge building is found lacking as far as SE / ESD is concerned. Instead, sustainability related curriculum must concern itself with shifting attitudes and modifying future behaviours, which is more complex. Behavioural change can be brought about by influencing attitudes, and this can be achieved through education (Cotgrave and Kokkarinen, 2010). Although it is generally agreed that SE / ESD results in positive environmental behaviours (McMillan, Wright and Beazley, 2004; Chen and Jeong, 2009), this is highly contested within teaching and learning scholarship. He and Greenberg (2009) postulate that long-term orientation will only be adopted by students if such courses are able to instil internal motivation towards sustainable living. The curriculum needs to create questioning individuals, who question their own consumption and those of producers of goods and services. Hence, the curriculum must accommodate more thought provoking ideas within content, design and development.

A review of recent scholarship within higher education domain reveals that sustainability related education has been widely supported. Wright (2007) reminds of the basic purpose of higher education and posits that colleges and universities must share the responsibility to secure quality of life for the future generations. Wade (1999) observes that students do possess tacit knowledge about sustainability discourse (through exposure to media or peer pressure for instance), but it is for HEIs to make a real difference and act as agents of change. It must be clarified at this juncture that though the acronym ESD is widely used, sustainability education (SE) is

the other commonplace terminology used within this discipline. Kevany (2007) makes no distinction between these – apart from the scale, linking the former to government stewardship and the latter to corporate stewardship. Dale and Newman (2005) agree and observe that they both have a common goal of reconciling critical social, ecological and economic problems facing the world. This paper therefore opts to use these two terms interchangeably.

SE / ESD in hospitality and tourism higher education

Current literature in SE domain indicates that SE / ESD in hospitality context is a highly underexplored area of research and in its infancy stage (Deale *et al.*, 2009). Boley (2011) advocates an integrated approach to embedding sustainability within all aspects of hospitality education and further notes that this is the ‘ethical’ thing for curriculum developers to do. He posits that SE can enhance employability (as the curriculum is informed by the needs of the industry), will produce graduates that can enhance destination’s triple bottom line and the complexity of this subject area will propel students towards higher order learning skills as per Bloom’s Taxonomy (Bloom and Krathwohl, 1956). Integration across courses is very important, given the trans and interdisciplinary nature of hospitality education. Jurowski and Liburd (2001: 1) capture this and state ‘when students are taught how these principles are related to specific management functions in various courses, they will be better prepared to apply them in the management of hospitality and tourism operations’. Millar and Park (2013) confirm that hospitality students have a general awareness, but that does not necessarily stem from what they learn in the classroom. They further note that contextual learning allows students the opportunity to provide more specific and actionable techniques to implement tangible sustainable strategies.

Issues and challenges

However, the ground realities of SE are far more complex. As is evident when defining the scope and very nature of sustainability, ESD has been widely criticised for its ambiguity and indistinct definitions. Kagawa (2007) highlights that there seems to be a clear lack of a single framework, conceptualisation or a common understanding of the sustainability agenda, and this is impacting SE also. Sustainability is a complex, dynamic, fluid and evolving concept, which creates further challenges for educators and practitioners alike. Therefore, Alvarez and Rogers (2006) point out the need for a pedagogical discussion about the meaning, context, values and missions of SE before any significant integration can be adopted within the curricula. Lambrechts *et al.* (2013) raise the issue of which sustainability related competencies are more or less relevant, and how they can be delivered, as different stakeholders have varying priorities. Nicolaides (2006) observe other obstacles, such as inadequate financial resources needed for initial investment and a prevailing social culture of inaction. According to this study, rigid conservative attitudes, lack of expertise and tradition further hinder change.

There also seems to be a general lack of consensus whether it is better to teach sustainability as a part of integrated curriculum or stand alone subject (Christensen, Peirce, Hartman, Hoffman, and Carrier, 2007). Wright (2003) and Jurowski and


Liburd (2001) adopt a holistic position and advocate that sustainability education must be infused through all aspects of the course. This is a complex task and demands a redesigning of the hospitality management curriculum altogether. Can sustainable campus form the context within which SE / ESD be successfully delivered, while allowing integration across courses? The following section discusses the relevance of sustainable campus in higher education.

Sustainable campus (SC) - Situated learning of sustainability

‘The physical campus is a literal embodiment of an institution’s philosophies, goals and administrative decisions’ (Kirk, 1999, p. 39).

Orr (1992) strongly expresses his views on SC as he succinctly states ‘teaching students about sustainability, when their immediate learning environment (the campus) is not sustainable itself is a paradox’. There is an evident shift in SE paradigm, as sustainability related curriculum is increasingly being located in the context of SCs. Many prestigious universities, such as University of Gothenburg, Leuphana University (Germany), Stanford University and Universiti Sains Malaysia pride themselves on delivering SE within their green campus. A sustainable campus can be defined as one ‘that acts upon its local and global responsibilities to protect the wellbeing of humans and ecosystems’ (Cole, 2003). The concept of SC has been strongly advocated in recent scholarship in this research area. Krizek, Newport, White and Townsend (2012) attest the same and note that SC can ensure that educational experience is coherent inside and outside the classroom, as students observe and learn from the campus, which physically models sustainability principles. The campus, modelled on principles of sustainability, itself forms the context of ESD. James and Card (2012) support the idea from a learning perspective, as they theorise that the campus facilities become a live laboratory, extending the learning beyond the classroom. Clearly, the idea of SC is consistent with theory of situated learning, as student learning is located in the context (the campus). Finaly and Massi (2012) argue that a SC can bring an abstract concept like sustainability to life. Such initiatives on-the-ground can help demonstrate how close to reality the concept is (Leal Filho, 2000). White (2003) agrees as the author notes that SC can allow for stronger articulation of real-world problems. Others such as Figueredo and Tsarenko (2013) note that SC can positively impact student engagement and pro-environmental behaviours, active learning, multi-level analyses and creativity.

It is evident through the discussions that the idea of campus sustainability can be approached in many ways. Following are some highly publicized and successful examples of campus sustainability initiatives :

-  University of Kansas placed onus on the learners – through student organisations and promoting activism to stimulate strong level of interest. In this sense, students are encouraged to create their own CoP; thereby creating their own learning. This was then backed up with relevant readings and by aligning the same ethos throughout the operations, such as purchasing, waste management and recycling (White, 2003).

- ✚ Figueredo and Tsarenko (2013) cite the example of a major Australian university, that adopts a two part approach to sustainability – firstly, through physical alteration of the campus infrastructure in line with principles of sustainable resource management (the context); and secondly by engaging stakeholders through information provision, promotional campaigns and education (CoP). The university also initiated voluntary programmes such as Green Reps to stimulate greater interest.
- ✚ Finlay and Massey (2012) advocate Ecocity approach to university campuses. The idea of Ecocity, popularised by Register (2006) views a campus as a micro-system, built on the principles of ecological and social wellbeing of all stakeholders. In this sense, the foundation of the campus is themed around sustainability, and this permeates through all aspects, such as supply chain, operations, building design, teaching, learning and research; and student learning is grounded in the context .
- ✚ Brown University initiated its well advertised sustainability campaign called BIG (Brown is Green). The prime focus of the initiative is community collaborations (CoP), with the view to integrate them, and to spread the benefits to the wider stakeholders. In addition, the BIG campaign also aligns teaching, research, and student initiatives with principles of sustainability (Brown University, 2011).

This list is far from exhaustive as similar initiatives have been successfully adopted in HEIs across the globe. It is evident that such initiatives have been modelled on principles of situated learning. Based on above cited examples, the last section of this study recommends that hospitality management education be located within the context of SC to be effective.

Conclusions

The need for all of us to assume collective responsibility is evident, to secure a future for humankind, and this can only be achieved if principles of sustainability are embraced by businesses, governments and consumers alike. HEIs have a key role to play if this shift is to take effect, as they have access to the leaders of today and tomorrow. What is needed is highly progressive attitude on part of decision makers. Sustainability needs to be considered at all levels (top-down and bottom-up). As James and Card (2012) note, there is an urgent need to foster campus culture that is supportive of teaching, research and operations directed at sustainability. Clearly, if any such enterprise is to make meaningful progress, collaborative efforts are needed on the part of students, staff, academics and administrators alike (Perrin, 2001). SE is a complex agenda, and demands integration across disciplines if long-term progress is to be made. Therefore, SC can form effective context within which sustainability can be taught in hospitality disciplines and beyond.

Richardson and Lynes (2007) investigate some of the key barriers that might impact campus sustainability. The prime factor identified through their research was financial concerns. Berne *et al.* (2011) address financial concerns and postulate that although SC may demand heavy initial investment, but in the long-term, margin improvement

can be achieved through greater operational efficiencies, more effective use of resources, lower costs and tax subsidies and grants often offered by governments in recognition of such initiatives. International Standards Organisation presents a positive outlook as well, while observing that sustainability can act as a prime source for competitive advantage, stronger reputation, access to capital and investors (ISO 26000: 2010). All in all, it can make perfect business sense too! It is evident that governments, consumers and media are progressively turning green (Ottman, 2010) and this presents a unique opportunity for HEIs; not only from a student learning perspective, but also a compelling case for the future, and to secure better quality of life for one and all. The future of hospitality education is green.

List of References

- Alvarez, A. and Rogers, J. (2006), 'Going 'out there': learning about sustainability in place', *International Journal of Sustainability in Higher Education*, 7(2), pp. 176-188.
- Bader, E. (2005), 'Sustainable hotel business practices', *Journal of Retail and Leisure Property*, 5(1), pp. 70-77.
- Barber, N., Deale, C. and Goodman, R. (2011), 'Environmental sustainability in the hospitality management curriculum: perspectives from three groups of stakeholders', *Journal of Hospitality and Tourism Education*, 23(1), pp. 6-17.
- Bardaglio, P. (2007), 'A moment of grace: Integrating sustainability into the undergraduate curriculum', *Planning for Higher Education*, 36(1), pp. 16-22.
- Berns, M., Townend, A., Khayat, Z., Balagopal, B., Reeves, M., Hopkins, M.S. & Kruschwitz, N. (2011), "Sustainability and Competitive Advantage", *MIT Sloan Management Review*.
- Bloom, B. S. and Krathwohl, D.R. (1956), *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*, New York: David McKay Company.
- Boley, B. (2011), 'Sustainability in hospitality and tourism education: towards an integrated curriculum', *Journal of Hospitality and Tourism Education*, 23(4), pp. 22-31.
- Brown, J.S. and Duguid, P. (2001), 'Knowledge and organisation: a social-practice perspective', *Organisation Science*, 12 (2), pp. 198-213.
- Brown University (2011), Brown is Green, available at www.brown.edu/Departments/Brown_is_Green (accessed 3 January, 2014)
- Chen, C. and Jeong, M. (2009), 'Students' perspectives of environmental education needs in the hospitality curricula', *Journal of Hospitality and Tourism Education*, 21(2), pp. 41-47.
- Christensen, L.J., Peirce, E., Hartman, L.P., Hoffman, W.M. and Carrier, J. (2007), 'Ethics, CSR, and sustainability education in the Financial Times top 50 global business schools: baseline data and future research directions', *Journal of Business Ethics*, 73 (4), pp. 347-68.
- Clarke, J. (1997), A framework of approaches to sustainable tourism, *Journal of Sustainable Tourism*, 5(3), pp. 224-233.
- Cole, L.R. (2003), 'Assessing sustainability on Canadian university campuses: development of a campus sustainability assessment framework', unpublished Master's thesis, Royal Roads University, Victoria.

- Contu, A. and Willmott, H. (2003). 'Re-embedding situatedness: the importance of power relations in learning theory', *Organisation Studies*, 14 (3), pp. 283-96.
- Corcoran, P.B. and Koshy, K.C. (2010), "The Pacific way: sustainability in higher education in the South Pacific Island nations", *International Journal of Sustainability in Higher Education*, 11 (2), pp. 130-40.
- Cortese, A.D. (2003), 'The critical role of higher education in creating a sustainable future', *Planning for Higher Education*, March-May, pp.15-22.
- Cotgrave, A.J. and Kokkarinen, N. (2010) 'Developing a model promoting sustainability literacy through construction curriculum design', *Structural Survey*, 28(4), pp. 266-280.
- Dale, A. and Newman, L. (2005), 'Sustainable development, education and literacy', *International Journal of Sustainability in Higher Education*, 6(4), pp. 351-362.
- Deale, C., Nichols, J., Jacques, M.S. and Jacques, P. (2009), 'A descriptive study of sustainability education in the hospitality curriculum', *Journal of Hospitality and Tourism Education*, 21(4), pp. 34-42.
- Down, L. (2006), 'Addressing the challenges of mainstreaming education for sustainable development in higher education', *International Journal of Sustainability in Higher Education*, 7(4), pp. 390-399.
- Dryzek, J. (2005), *The Politics of the Earth: Environmental Discourses* (2nd ed.). Oxford University Press: Oxford.
- Engeström, Y. (2001), 'Expansive learning at work: towards an activity-theoretical conception', *Journal of Education and Work*, 14(1), pp. 133-56.
- Figueredo, F.R. and Tsarenko, Y. (2013), 'Is being green a determinant of participation in university sustainability initiatives?', *International Journal of Sustainability in Higher Education*, 14(3), pp. 242-53.
- Finlay, J. and Massey, J. (2012), 'Eco-campus: applying the eco-city model to develop green university and college campuses', *International Journal of Sustainability in Higher Education*, 12 (2), pp. 150-65.
- Fox, S. (2000) 'Communities of practice, Foucault and actor-network theory', *Journal of Management Studies*, 37 (6), pp. 853-67.
- Handley, K., Sturdy, A., Fincham, R. and Clark, T. (2006), 'Within and beyond communities of practice: making sense of learning through participation, identity and practice', *Journal of Management Studies*, 43 (3), pp. 641-54.
- He, H.A. and Greenberg, S. (2009), 'Motivating sustainable energy consumption in the home', *Proceedings of the ACM (Association for Computing Machinery) CHI (Human Factors in Computing Systems) Workshop on Defining the Role of HCI (Human-Computer Interaction) in the Challenges of Sustainability*, Boston, MA, 4-9 April, pp. 1-5.
- Herremans, I. (2006), *Cases in sustainable tourism: An experiential approach to making decisions*, New York: Haworth Hospitality Press.
- Hind, P., Wilson, A. and Lenssen, G. (2009), 'Developing leaders for sustainable business', *Corporate Governance*, 9 (1), pp. 7-20.
- Hoadley, C.M. and Kilner, P.G. (2005), 'Using technologies to transform communities of practice into knowledge building communities', *SIGGROUP Bulletin*, 25(1), pp. 31-40
- Hodgkinson-Williams, C., Stay, H. and Sieborger, I. (2008), 'Developing

- communities of practice within and outside higher education institutions', *British Journal of Educational Technology*, 39 (3), pp. 432-42.
- ISO 26000 (2010), 'Guidance on social responsibility', *International Standards Organisation*, Geneva.
- James, M. and Card, K. (2012), 'Factors contributing to institutions achieving environmental sustainability', *International Journal of Sustainability in Higher Education*, 13(2), pp. 166-176.
- Jones, P., Trier, C.J. and Richards, J.P. (2008), 'Embedding education for sustainable development in higher education: a case study examining common challenges and opportunities for undergraduate programmes', *International Journal of Educational Research*, 47 (6), pp. 341-50.
- Jurowski, C. and Liburd, J. (2001), 'A multi-cultural and multi disciplinary approach to integrating the principles of sustainable development into human resource management curricula in hospitality and tourism', *Journal of Hospitality and Tourism Education*, 13(5), pp. 36-50.
- Kagawa, F. (2007), 'Dissonance in students' perceptions of sustainable development and sustainability', *International journal of Sustainability in Higher Education*, 8(3), pp. 317-338.
- Karalis, T. (2010), 'Situated and transformative learning: exploring the potential of critical reflection to enhance organisational knowledge', *Emerald Group Publishing Limited*, 24 (1), pp. 17-20.
- Kevany, K. (2007), 'Building the requisite capacity for stewardship and sustainable development', *International Journal of Sustainability in Higher Education*, 8(2), pp. 107-122.
- Kirk, C.M. (1999), 'Nexus: campus as place', *Planning for Higher Education*, 27(1), pp. 39-44.
- Knowles, M. (1984) *Andragogy in Action*. San Fransisco: Jossey-Bass.
- Krizek, K., Newport, D., White, J. and Townsend, A. (2012) 'Higher education's sustainability imperative: how to practically respond?', *International Journal of Sustainability in Higher Education*, 13 (1), pp. 19-33.
- Lambrechts, W. Mula, I., Ceulemans, K., Molderez, I. and Gaeremnyck, V. (2013), 'The integration of competencies for sustainable development in higher education: An analysis of bachelor programs in management', *Journal of Cleaner Production*, 48, pp. 65-73.
- Lave, J. (1989) The acquisition of culture and the practice of understanding in J. Stigler, R. Shweder and G. Herdt (eds.), *The Chicago symposia on human development*. Cambridge: Cambridge University Press.
- Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate peripheral participation*, Cambridge University Press: Cambridge.
- Leal Filho, W. (2000), 'Dealing with misconceptions on the concept of sustainability', *International Journal of Sustainability in Higher Education*, 1(1), pp. 9-19.
- McMillan, E.E., Wright, T. and Beazley, K. (2004), 'Impact of an environmental studies class on students' values', *Journal of Environmental Education*, 35(3), pp. 19-29.
- Millar, M. and Park, S. (2013), 'Sustainability in higher education: the industry's perspective and implications for curriculum', *Journal of Hospitality and Tourism Education*, 25(2), pp. 80-88.
- Mowforth, M. and Munt, I. (2009) *Tourism and Sustainability: Development, Globalisation and New Tourism in the Third World*, 3rd edition, Abingdon: Routledge

- Naeem, M. and Neal, N. (2012), 'Sustainability in business education in the Asia Pacific region: a snapshot of the situation', *International Journal of Sustainability in Higher Education*, 13(1), pp. 60-71.
- Nichols, J. (2007), 'A health economy and hearty economy can co-exist', *Journal of Interior Design*, 32(3), pp. 2-8.
- Nicolaides, A. (2006), 'The implementation of environmental management towards sustainable universities and education for sustainable development as an ethical imperative', *International Journal of Sustainability in Higher Education*, 7(4), pp. 414-424.
- Office for National Statistics (2011) *Sustainable Tourism: A Review of Indicators*, October 10 [Online]. Available at: http://www.ons.gov.uk/ons/dcp171776_236479.pdf (Accessed: 16 July, 2013).
- Olssen, M. and Peters, M.A. (2005), 'Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism', *Journal of Education Policy*, 20(3), pp. 313-345.
- Orr, D.W. (1992), *Ecological Literacy: Education and the Transition to a Postmodern World*, State University of New York Press, Albany, NY.
- Ottman, J.A. (2010), *The new rules of Green Marketing-Strategies, tools and inspirations for sustainable branding*, Berrett Koehler Publisher, New York.
- O'Suivillan, E. (2003), 'Bringing a perspective of transformative learning to globalised consumption', *International Journal of Consumer Studies*, 27 (4), pp. 326-30.
- Perrin, N. (2001), 'The greenest campuses: an idiosyncratic guide', *The Chronicle of Higher Education*, 47(30), pp. B7-B10.
- Posch, A. and Steiner, G. (2006), 'Integrating research and teaching on innovation for sustainable development', *International Journal of Sustainability in Higher Education*, 7(3), pp. 276-292.
- Roberts, J. (2006), 'Limits to communities of practice', *Journal of Management Studies*, 43 (3), pp. 623-40.
- Richardson, G. and Lynes, J. (2007), 'Institutional motivations and barriers to the construction of green buildings on campus', *International Journal of Sustainability in Higher Education*, 8(3), pp. 339-354.
- Scales, P. (2013) *Teaching in the Lifelong Learning Sector*, 2nd ed., Open University Press: Maidenhead.
- Shephard, K. (2008), 'Higher education for sustainability: seeking affective learning outcomes', *International Journal of Sustainability in Higher Education*, 9 (1) , pp. 87-98.
- Stauffacher, M., Walter, A., Leng, D., Wiek, A. and Scholz, R. (2006), 'Learning to research environmental problems from a functional socio-cultural constructivism perspective', *International Journal of Sustainability in Higher Education*, 7(3), pp. 252-275.
- Stubbs, W. (2013), 'Addressing the business-sustainability nexus in postgraduate education', *International Journal of Sustainability in Higher Education*, 14(1), pp. 25-41.
- UNDESD (2011), United Nations Decade of Education for Sustainable Development [Online]. Accessible at <http://desd.org> (accessed 16th July, 2013)
- UNESCO (2005), *UNESCO and Sustainable Development*, UNESCO, Paris.
- Wade, J. (1999), 'Students as environmental change agents', *Journal of Hospitality and Tourism Education*, 9(2), pp. 16-20.

- Waddock, S. (2007), 'Leadership integrity in a fractured knowledge world', *Academy of Management Learning & Education*, 6 (4), pp. 543-57.
- Wals, A. (2010), 'Mirroring, Gestalt-switching and transformative social learning', *International Journal of Sustainability in Higher Education*, 11 (4), pp. 380-90.
- Wenger, E., McDermott, R. and Snyder, V.M. (2002), *Cultivating Communities of Practice: A Guide to Managing Knowledge*, Harvard Business School, Boston, MA.
- White, S.S. (2003), 'Sustainable campuses and campus planning', *International Journal of Sustainability in Higher Education*, 4(4), pp. 344-56.
- Wright, J. (2003), 'Introducing sustainability into the architecture curriculum in the United States', *International Journal of Sustainability in Higher Education*, 4(2), pp. 100-105.
- Wright, T. (2007), 'Developing research priorities with a cohort of higher education for sustainability experts', *International Journal of Sustainability in Higher Education*, 8(1), pp. 34-43.
- Wright, T. and Horst, N. (2013), 'Exploring the ambiguity: what faculty leaders really think of sustainability in higher education', *International Journal of Sustainability in Higher Education*, 14(2), pp. 209-227.